

**MCCONNELL
DOWELL**

CREATIVE CONSTRUCTION™

60 YEARS

of Creative
Construction

Company Profile





**From ambitious
resource projects
in remote locations...**

6 YEARS
of Creative
Construction

Chith Export Facility, Australia

A large, complex and remotely located project that revolutionised the design and construction approach for major marine infrastructure.



Click the play button
to watch the project video:



Waterview Connection, New Zealand

McConnell Dowell delivered the Waterview Connection project, as part of an Alliance to build Australasia's largest ever road tunnel.

Five kilometres of new motorway, including two tunnels each 13 metre diameter and 2.4 km long.



Click the globe icon to read the Waterview case study.

**...to city-shaping
new infrastructure
projects.**





**For 60 years we
have successfully
delivered complex
infrastructure
with our customers
and the community.**

60 YEARS
of Creative
Construction

1961

Jim Dowell and Malcolm McConnell, two talented, creative individuals with a powerful drive to make things better and so began the construction company, McConnell Dowell.



Click the play button
to watch our founders' story.

What is Creative Construction?



“ **The projects they take on are complex so the Creative Construction Brand fits.** ”

Engineering Consultant

from MCD's 2021 customer perceptions survey run by TKP Market Research

Creative Construction at McConnell Dowell is about solving problems, overcoming challenges, and delivering positive and impactful outcomes for the customers we serve and communities we work within.

We encourage and empower our people to think creatively, apply innovation where it adds value, and maintain a safe and conservative risk profile in all that we do.



Creative Construction is more than a marketing slogan to McConnell Dowell. It's the essence of our company, demonstrated time and time again by the McConnell Dowell team over the last 60 years.

Recent examples of Creative Construction



Introducing modularised wharf construction to speed up marine projects and reduce product time-to-market for leading resource companies.



Redesigning and re-staging a complete bridge (abutments and deck) for 'offline' construction and moving it into place over one weekend to minimise community disruption.



Using drones/UAV and software to safely and accurately survey, monitor and communicate our projects' progress to our customers and the community.



Pioneering the use of recycled plastic noise walls on a major freeway project, re-purposing the equivalent of 25,000 households' plastic waste for a year.



Adopting new trenchless technology to install a world record 2021 m long, 1220 mm diameter pipe without the disruption and environmental impact of a trench.

Group Brands

The McConnell Dowell Group has a long and proud history of commercialising projects and is widely respected for delivering 'Creative Construction' solutions.

The McConnell Dowell brand is well regarded for integrity, consistency in application, value for money and being a technology-driven company.



McConnell Dowell - The Creative Construction Company, building better communities through safe, smart, efficient infrastructure.

www.mcconnelldowell.com



Built Environs - Provides multi-disciplinary capability in design and construction of commercial, industrial and institutional buildings.

www.builtenvirons.com.au



Parent Company Aveng Limited, have a number of specialist operating group.

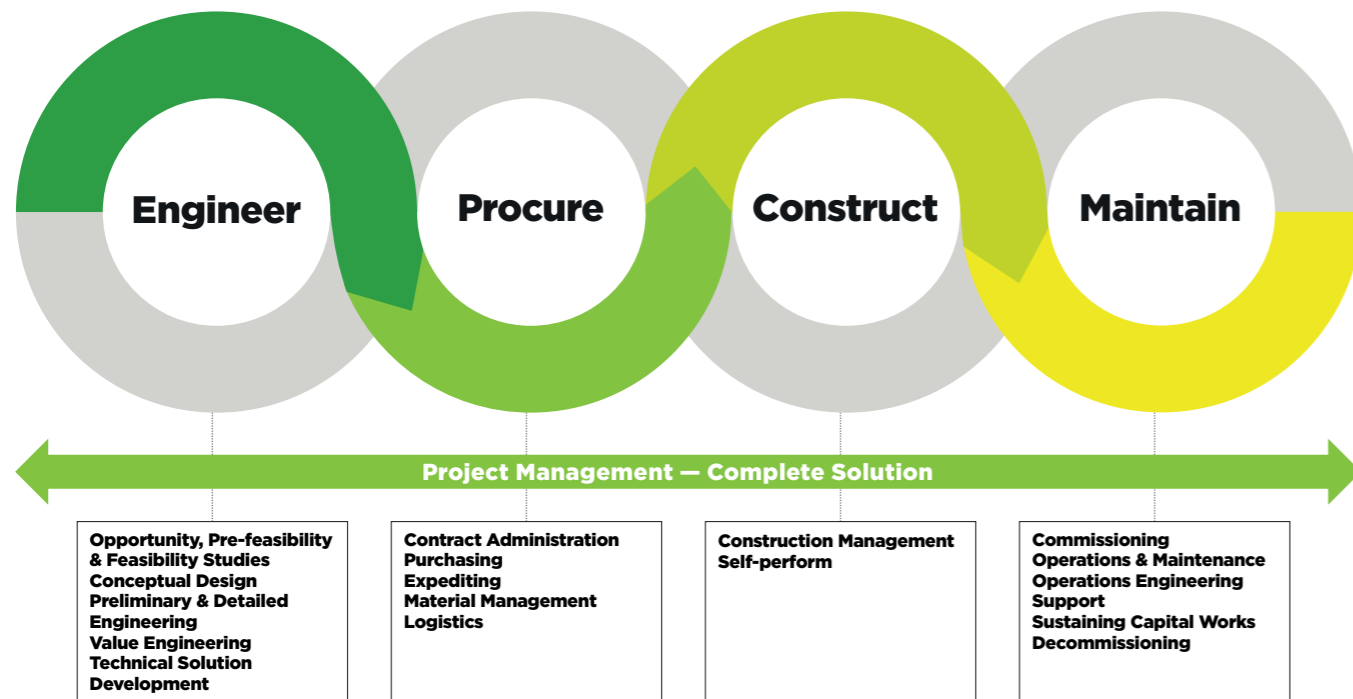
www.aveng.co.za



What we do

We offer services across the complete project lifecycle to suit our customers' objectives and preferred project delivery approach.

Value Offering



Market Sectors

- | | | |
|---|---|---|
| Infrastructure | Resources | Building |
| <ul style="list-style-type: none"> Power Water & Waste Water Transport | <ul style="list-style-type: none"> Mining & Metals Oil & Gas Petrochemical | <ul style="list-style-type: none"> Government Commercial/Industrial Social/Residential |

Specialist Capabilities

- | | |
|---|--|
| <ul style="list-style-type: none"> Marine Pipelines Tunnelling & Underground Rail | <ul style="list-style-type: none"> Mechanical Civil Fabrication Building |
|---|--|

Where we work

We operate in 26 locations throughout Australia, Asia, New Zealand and the Pacific Islands.



Safety



The safety of our people is paramount to our success. Our customers demand a safe project, and we deliver. Our safety results place us in the top tier of contractors in our industry.

We nurture a culture of safety ownership. Every employee has a job description and set of safety obligations to meet. Our managers are visible safety leaders. In addition to traditional safety metrics, their performance is tracked in activities such as the number of safety audits they carry out personally and how many 'SafeTalks' they deliver.

Our site safety teams are structured and resourced effectively. Every project maintains an HSE Risk Register and our teams work from a comprehensive set of Safe Operating Procedures, Safe Work Instructions, and JSEAs.

Sustainability



We act today with the future in mind.

Thinking creatively and sustainably is fundamental when building infrastructure and resources for our communities. Ensuring a sustainable tomorrow for our teams, customers and the environment means we must perform to the best of our ability today.

We are a progressive company and believe in empowering our employees to drive improvement in all areas of our business. Establishing a learning culture is a key focus, helping us shape our systems in the areas of safety, environment and sustainability and ensure our accumulated knowledge is shared throughout our business.

“ They ask if there’s a better way. ”

Government Infrastructure customer
from MCD's 2021 customer perceptions survey run by TKP Market Research.

Environment



We continue to grow our capabilities and performance.

Our environmental commitment is second to none; we believe it is everyone's responsibility, regardless of role or the nature or location of the project.

We lead by example promoting environmental management and empowering our people to be their best. Everyone is encouraged to be creative and innovative in how they approach the management of our local environments.

Our dedicated team of environmental professionals actively support our teams, helping them achieve our high environmental standards delivering exceptional results for our customers and communities.

We take a positive and collaborative approach towards environmental management and maintain our focus on: accountable leadership; reducing emissions; efficient use of energy, resources and project materials; minimising waste; and by responsibly managing the biodiversity of local flora and fauna. It's this 'one team' approach with our customers and partners that enables us to create a framework for our environmental standards which has been recognised throughout the industry.

Quality



Raising the bar for excellence and accountability.

We pride ourselves on the quality of our work and have raised the bar for corporate excellence and accountability.

Infrastructure assets have to stand the test of time so we ensure the highest quality result for every project. Our quality system is the result of 60 years of project experience, and has been honed, improved and refined to meet today's exacting ISO standards. All our operations are certified by Lloyds Register Quality Assurance (LRQA) to AS/NZS ISO 9001.

Our quality leaders are also skilled in their craft and provide governance and assurance across all our projects. This means our customers have added confidence in the finished product. Most importantly, our people are passionate about getting it right. We provide them with the right tools, systems and training to ensure we deliver a quality project.

“ In safety, McConnell Dowell do things the right way, and better than the others. ”

Engineering Consultant
from MCD's 2021 customer perceptions survey run by TKP Market Research

Specialist Capabilities



Rail



Pipelines



Civil



Fabrication



Marine



Mechanical



Tunnelling &
Underground



Building

“

If you want something specialist or technically demanding, you go to McConnell Dowell.

Government Infrastructure Customer

from MCD's 2021 customer perceptions survey
run by TKP Market Research

”

Civil



McConnell Dowell's broad civil capability is demonstrated in the delivery of both small and large scale projects, across the infrastructure, oil and gas, mining and building sectors. From metro tunnels in Singapore to runway upgrades at Melbourne Airport, to post earthquake reconstruction works in Christchurch, McConnell Dowell uses its strong experience in building foundations, precast concrete, piling, hardstands, roads, runways and bulk earthworks combined with our systems and processes to drive production and deliver projects for our customers on time and within budget.

Our multi-disciplinary experience in tunnelling, water, roads, bridges, structures and rail enables us to deliver complex major projects in regional and urban centres with minimal impact to the local community during construction.



For more information about our civil projects, click the globe icon.

Rail



McConnell Dowell understands the rail sector and the need for robust design processes; safe, flexible construction approaches; and open communication with customers throughout the development or augmentation of a rail system.

We have expertise in the construction, maintenance and asset management of light, metropolitan and urban transport infrastructure through to regional and heavy haul railway networks.

We are fully equipped with our own rail plant and have a dedicated, state-of-the-art plant yard and workshop in Victoria to provide full maintenance of our fleet.

We are skilled at working on or near live railways during construction of track, rail systems, civil structures, stations and depot facilities.

We operate as an approved Rolling Stock Operator under Rail Safety Accreditation for a range of maintenance and renewal contracts across Australia.



For more information about our rail projects, click the globe icon.

“
One of the few companies that know how to do a GREAT job on projects.
 ”

Engineering Consultant
 from MCD's 2021 customer perceptions survey run by TKP Market Research

Marine



The McConnell Dowell name is synonymous with marine design and construction, with over 330 marine projects and 60 years of award winning solutions for wharves, jetties, ocean outfalls, breakwaters, causeways and submarine pipelines.

We bring a strong track record of working in busy operational port environments and provide a safe working environment for all port users.

Our fleet of marine equipment is ahead of the world, while our systems and procedures for marine project delivery are proven in the protection of our people, plant and the environment.

“
Your ‘best for project’ philosophy and focus on mitigating risk added significant value to the project.
”
 Government infrastructure customer



For more information about our marine projects, click the globe icon.

Tunnelling & Underground



McConnell Dowell tunnels have provided the means to alleviate traffic congestion, extend rail networks, generate sustainable hydropower, unlock precious resources and sustain communities through new clean water supplies. We have delivered over 140 km of safe, smart, efficient tunnels and underground spaces while minimising community and environment impact.

Our skill is in selecting the right technology and approach to suit each project’s unique requirements. We have engineered solutions using tunnel boring machines (TBM), road headers, drill and blast, pipe-jacking, micro-tunnelling and horizontal directional drilling (HDD).

Our strong relationships with key equipment suppliers mean we mobilise quickly and begin construction on time. Our standard practice is to coordinate underground and above-ground activities to minimise any inconvenience to businesses, residents and traffic.



For more information about our tunnelling & underground projects, click the globe icon.

Pipelines



McConnell Dowell is a leading international pipeline contractor. We have constructed over 20,000 km of new pipe networks across more than 200 projects including gas, petroleum, water and slurry pipelines.

These pipelines help drive economic and social progress across Australia, New Zealand, Asia, Africa and the Middle East.

McConnell Dowell is the partner of choice for complex EPC and construction projects. We are experts in large diameter pipeline construction and have delivered gas pipelines up to 1300 mm (50") in diameter and water pipelines up to 1800 mm (70") in diameter.

Our in-house specialist skills and plant enable execution of HDD, micro-tunnelling, marine pipe pulls, pipe bridges and other complex crossing solutions.

Our sustained success in the pipeline industry is based on strong customer collaboration and effective community consultation and environmental management.



For more information about our pipeline projects, click the globe icon.

Fabrication



Recognising the quality, safety and speed benefits of prefabrication and modularisation, we pioneered large scale wharf steel modules for the mining sector and have supplied our oil and gas and power industry customers with intricate pre-assembled racks (PARs) and modules (PAMs). We have also provided structural steel, concrete structures and modules.

We deliver our comprehensive prefabrication and modularisation service through our fully equipped workshop, located on Batam Island in Indonesia, and through a network of quality-controlled fabrication and precast providers located across our operating regions.

Our procurement team includes quality assurance and logistics professionals who facilitate and support our international procurement activities through:

- Supplier evaluation and auditing – both pre-award and during execution
- Sourcing support for projects – suppliers and logistics providers
- Value Engineering – supporting projects to optimise design in terms of quality, cost and timing
- Supply contract negotiation
- Establishment and management of remote QA teams
- Monitoring of supply progress and expediting delivery
- Finalisation of quality documentation.

“
They stand for clever engineering.
”

Government Infrastructure customer
 from MCD's 2021 customer perceptions survey run by TKP Market Research



For more information about our fabrication projects, click the globe icon.

Mechanical



With a long history in delivering complex mechanical and electrical construction projects stretching back to the early 1980s, McConnell Dowell is the construction company of choice.

Our mechanical group has specialist skills in oil and gas, mining and minerals, chemical processing and water. We have carried out many complex and challenging projects under all contract models, including EPC, D&C, Alliance and construct only models, of various sizes ranging from \$5M to \$300M+. Our experience extends across remote locations within Australia and throughout Indonesia, Laos and PNG, to name a few.

We have delivered complex piping, mechanical and electrical construction projects in demanding environments for customers such as ExxonMobil, BP, BHP Billiton, DuPont, and various water authorities. Our project engineers and managers have specialist skills in piping, mechanical and electrical design and installation, having successfully managed projects with peak workforces in excess of 1000 people. We've achieved industry leading results in safety performance and quality and customer satisfaction.



For more information about our mechanical projects, click the globe icon.

Building



Building on McConnell Dowell's 60 years of history delivering projects across Australia and New Zealand, Built Environs has proven capability of delivering complex projects across all sectors.

Since 1987 Built Environs has delivered a diverse portfolio of projects in both South Australia and Western Australia. We have now invested in strong leaders in Victoria and New Zealand to meet the needs of our vibrant, sustainable construction industries.

Built Environs deliver projects that enhance the way people live, work and play. They understand that projects delivered in operational and community environments require an inclusive and structured approach to stakeholder engagement and social procurement. Clients and the community are at the heart of the business, both during and after construction.



For more information about Built Environs, click the globe icon.

“
A builder of landmarks.
”

Government Infrastructure customer
from MCD's 2021 customer perceptions survey run by TKP Market Research

Market Sectors

Infrastructure

- ⚡ Power
- 🌊 Water & Waste Water
- 🎯 Transport

Resources

- 🏠 Mining & Metals
- 🌿 Oil & Gas
- 🏭 Petrochemical

Building

- 🏛️ Government
- 🏢 Community/Industrial
- 👤 Social/Residential



“
Smart people who treasure technical solutions.
”

Engineering Consultant
from MCD's 2021 customer perceptions survey
run by TKP Market Research

Infrastructure

Power



McConnell Dowell helps create safe, sustainable and efficient power infrastructure that supports today's energy hungry and environmentally conscious communities. We deliver civil, electrical, mechanical, pipelines and tunnelling works across all power generation types.

Water & Waste Water



Every community needs access to a safe and reliable water supply to thrive. Our expertise in water is world class, delivering projects that capture, store, treat, distribute and dispose of waste (outfall).

We've designed and delivered some of the world's largest and most efficient desalination plants, built new dams and large diameter water pipeline networks, ensured water security for urban and rural communities and installed environmentally responsible outfall pipes.

Transport



Our creative construction approach in transport minimises community disruption and drives progress in our major cities.

As urban communities continue to grow, the pressure and demand for complex transport facilities increase. Whether it's a new tunnel, the refurbishment of an historic bridge, the expansion of a highway, or the construction of train and tramways, we have the capacity and capability to meet any transport challenge.

Experience and intelligent engineering has allowed us to push 3000 tonne bridges into place over night. Smart construction staging has allowed us to rebuild an inner-city railway station while keeping passengers moving safely and on time. And tireless stakeholder communication has kept residents and businesses fully informed and connected during their road system upgrade.

Key Projects

Power

- **Te Mihi Geothermal Power Station**
New Zealand
- **Ambuklao and Binga Hydropower Plants**
Philippines
- **Keppel Merlimau Co-generation Power Station**
Singapore
- **Bogong Hydro Power Station**
Australia
- **Kidston Pumped Hydro**
Australia

Water & Waste Water

- **Hume Dam Upgrade**
Australia
- **Rosedale WWTP Outfall**
New Zealand
- **Sydney Desalination Project, Distribution Network**
Australia
- **Maris Hydro**
Philippines
- **SA Water Frameworks**
Australia
- **Snells Algies Outfall**
New Zealand
- **St Mary's Bay Water Quality Improvement**
New Zealand
- **Army Bay Ocean Outfall**
New Zealand

Transport

- **Waterview Connection**
New Zealand
- **Tuas Road Bridges**
Singapore
- **Level Crossing Removal Project**
Australia
- **Public Transport Projects Alliance**
Australia
- **Mulgoa Road Upgrade**
Australia
- **Wyndham Vale Stabling Yard**
Australia
- **Puhinui Station Interchange**
New Zealand
- **Russley Road Upgrade**
New Zealand



For more information about our infrastructure projects, click the globe icon.

Resources

Mining & Metals



The mining and metals sector is driven by efficiency, safety and value, and McConnell Dowell's multidiscipline capability and remote construction experience is highly valued by our customers.

We have specialised plant and people skilled in the construction of cross-country pipelines, marine terminals, process plants, materials handling equipment, rail infrastructure and underground construction. McConnell Dowell has delivered efficient new mining infrastructure in remote locations: from the harsh, dry Australian desert to the tropical rainforests of PNG, Indonesia and Laos.

Oil & Gas



A sector as broad as oil and gas demands a comprehensive skillset. Our portfolio expertise includes marine facilities, storage terminals, processing plants, pipelines, topsides, power, and water infrastructure.

We offer a multi-disciplined, integrated service with expertise in engineering, procurement, fabrication and the construction disciplines of pipelines, civil, marine and structural mechanical piping. We're also at the forefront of modularisation and pre-assembly with in-house fabrication and precast facilities. This approach minimises site labour, enhances quality and reduces construction programs.

Our engineering to procurement and construction solutions support innovative and intelligent thinking and provide our customers with the simplicity and accountability of a single management interface. Combined with our industry-leading systems to optimise safety, environmental and quality outcomes, we deliver cost-effective solutions and achieve outstanding results for our customers.

Petrochemical



Design, interface and integration management are crucial to success in the petrochemical sector. Our multidisciplinary approach is what sets us apart from our competitors.

Our skills encompass civil, mechanical and electrical solutions, and cover instrumentation, fabrication and piping. Whether blending facilities in Singapore, process plants in Thailand, or storage and distribution facilities in Indonesia, we've got the experience to deliver safe, high quality, well planned projects to all petrochemical customers.

Key Projects

Mining & Metals

- **Koniambo Nickel Project**
New Caledonia
- **Vale Malaysia Manufacturing Project**
Malaysia
- **Bakan Gold Mines Project**
Indonesia
- **Ore Car Repair Shop**
Australia
- **Chith Export Facility**
Australia
- **Roy Hill Iron Ore Project**
Australia

Oil & Gas

- **Singapore Parallel Train**
Singapore
- **Australia Pacific LNG Project**
Australia
- **Fourth Parallel Transmission Pipeline Stage 2**
Thailand
- **Northern Gas Pipeline**
Australia
- **Murrin Murrin Gas Pipeline Looping**
Australia
- **Tanggung Marine Works**
Indonesia

Petrochemical

- **Helios Bulk Liquid Storage & Blending Facilities**
Singapore
- **Lanxess Compass Civil Works Package**
Singapore
- **Jurong Aromatics Complex Jetty Works**
Singapore
- **Dow Petrochemical Facility**
Malaysia



For more information about our resource projects, click the globe icon.

Building



Government



We are proud to work with government to build better, more efficient infrastructure that serves communities. From local council, to state and federally-funded initiatives, we maximise value-for-money and manage a broad range of stakeholder and community relationships to ensure delivery is smooth and successful.

We combine a collaborative, best-for-project approach with accredited environmental, quality, safety and project management systems, to deliver consistent high quality construction – on time and on budget.

Commercial/Industrial



From large-scale industrial processing plants and high-tech manufacturing facilities to multi-storey office developments and landmark retail developments, we are experienced in working across all commercial delivery models and frameworks.

Our unwavering commitment to customer satisfaction, coupled with our commercial and contractual flexibility has produced a solid history of successfully delivering a diverse range of construction projects for a wide range of customers.

From traditional lump sum contracts to guaranteed maximum price and design and construct projects, we have the proven capability to deliver your next industrial or commercial construction project.

Social/Residential



With a strong history of delivering world-class education, entertainment, sporting, and leisure facilities, it is our commitment to customer-centred, solutions-based construction that achieves excellent results for our customers.

We understand that cost, quality and schedule are all imperative in building social infrastructure. That's why our dedicated team of in-house design management, and costing and planning professionals work closely with our customers, their stakeholders and our internally-assigned project teams to develop fully costed value-engineered designs that deliver greater cost, quality and time surety.

Key Projects

Government

- **Gold Coast Light Rail Building Works**
Australia
- **Parks Community Centre Redevelopment**
Australia
- **RAAF Base Edinburgh Single LEAP**
Australia
- **Whyalla Hospital Cancer Centre Redevelopment**
Australia
- **Modbury Hospital Upgrade**
Australia
- **Auckland City Mission**
New Zealand
- **Puhinui Station Interchange**
New Zealand

Commerical / Industrial

- **Adelaide Desalination Plant Building Works**
Australia
- **ACI Owens Illinois Glass Production Plants**
Australia
- **Ocean Keys Shopping Centre Redevelopment**
Australia

Social / Residential

- **Adelaide Oval Western Grandstand**
Australia
- **Adelaide Showground Goyder Pavilion**
Australia
- **University of South Australia Hawke Building**
Australia
- **University of Western Australian Biomedical Research Facility**
Australia
- **Urbanest at the University of Adelaide**
Australia
- **West Franklin Residential Apartments**
Australia



For more information about Built Environs building projects, click the globe icon.



**McCONNELL
DOWELL**
CREATIVE CONSTRUCTION™

60 YEARS
of Creative
Construction



McCONNELL
DOWELL
CREATIVE CONSTRUCTION™

6 YEARS

**of Creative
Construction**

mcconnelldowell.com